# EXHIBIT H

in

🔍 Abhilash Jindal

**Abhilash Jindal**

Assistant Professor at Indian Institute of Technology, Delhi

Berkeley, California, United States · 500+ connections

Sign in to connect

**Indian Institute of Technology, Delhi**

**Purdue University**

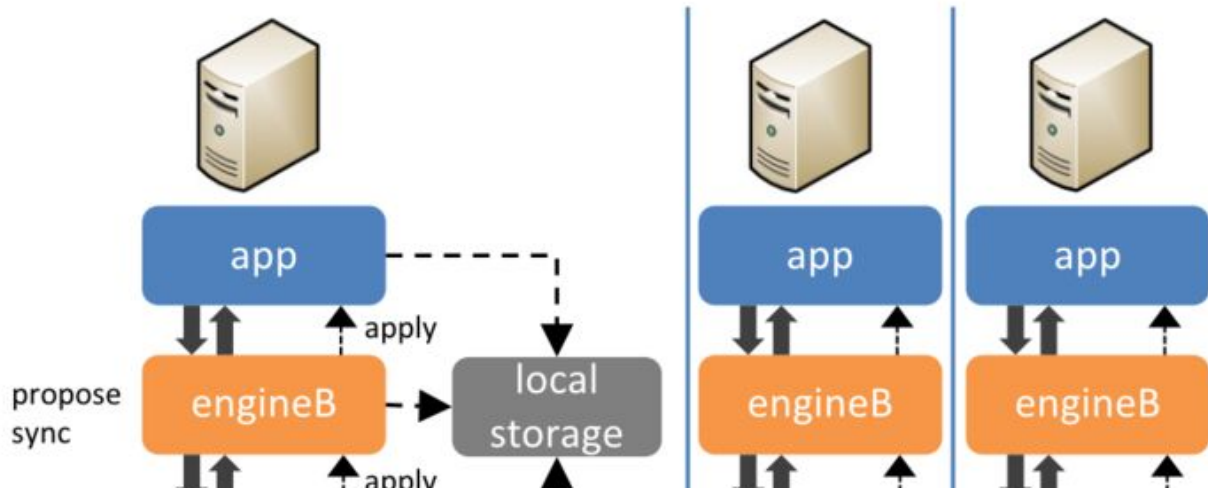**Personal Website** ↗

## Activity

**in** 🔍 Abhilash Jindal 👤

@AdamMGrant

**Something every nerdy kid needs to know: As people mature, they'll be drawn to you more for how you think than how you look. In adulthood, there's...**

Liked by Abhilash Jindal



**This Friday we are discussing a follow-up paper to Delos. (https://lnkd.in/d4Dde6Ug) Delos already virtualized consensus by providing a shared log...**

Shared by Abhilash Jindal

**Qualcomm is hiring FRESHERS and experienced candidates up to 3 years for the Corporate R&D AI Embedded Software Team in Bangalore ! Please send...**

Liked by Abhilash Jindal

https://www.linkedin.com/in/abhilashjindal

Abhilash Jindal

# Experience

### Assistant Professor
Indian Institute of Technology, Delhi

Jan 2021 - Present · 1 year 6 months

### CTO, Co-founder
Mobile Enerlytics

Apr 2014 - Present · 8 years 3 months

Mobile Enerlytics builds solutions to help app developers write energy-efficient apps.

### Senior Software Engineer
Instabase

Dec 2019 - Jan 2021 · 1 year 2 months

### Research Assistant
Purdue University

Aug 2011 - Jul 2017 · 6 years

West Lafayette, IN

Power management in smartphones.

# Education

### Purdue University
Doctor of Philosophy (PhD) · Computer Science

2011 - 2017

Towards automated energy debugging on smartphones

### Indian Institute of Technology, Kanpur
Bachelor of Technology · Electrical Engineering

https://www.linkedin.com/in/abhilashjindal

# Publications

### Hypnos: Understanding and Treating Sleep Conflicts in Smartphones

EuroSys '13 Proceedings of the 8th ACM European Conference on Computer Systems · 2013

To maximally conserve the critical resource of battery energy, smartphone OSes implement an aggressive system suspend policy that suspends the whole system after a brief period of user inactivity. This burdens developers with the responsibility of keeping the system on, or waking it up, to execute time-sensitive code. Developer mistakes in using the explicit power management unavoidably give rise to energy bugs, which cause significant, unexpected battery drain.

In this paper, we study a...

Show more ⌄

Other authors

👤 👤 👤

See publication ↗

### On Death, Taxes, and Sleep Disorder Bugs in Smartphones

HotPower 2013 · 2013

According to Benjamin Franklin, life holds but two certainties, death and taxes. As we enter the mobile era, the primary mobile device, i.e., the smartphone, faces the certainties of adopting aggressive sleeping policies to conserve battery energy, requiring programmers to use explicit power control APIs to keep the SOC/CPU on, and a third certainty that unavoidably rises from these: sleep disorder bugs.

In this paper, we articulate the fate and destiny of smartphone apps, sleep disorder bugs, as a critical technical challenge in the mobile era. We then present a taxonomy of sleep disorder bugs, and a categorization of time-critical sections which are the root cause of sleep disorders, in apps, framework services and the Android kernel. Finally, we present a unified system for detecting the spectrum of sleep disorder bugs.

Show less ⌃

## Multi-objective optimization and decision making approaches to cricket team selection

Applied Soft Computing · 2012

Other authors

See publication ⧉

## What is keeping my phone awake? Characterizing and detecting no-sleep energy bugs in smartphone apps

MobiSys '12 Proceedings of the 10th international conference on Mobile systems, applications, and services · 2012

Despite their immense popularity in recent years, smartphones are and will remain severely limited by their battery life. Preserving this critical resource has driven smartphone OSes to undergo a paradigm shift in power management: by default every component, including the CPU, stays off or in an idle state, unless the app explicitly instructs the OS to keep it on! Such a policy encumbers app developers to explicitly juggle power control APIs exported by the OS to keep the components on, during their active use by the app and off otherwise. The resulting power-encumbered programming unavoidably gives rise to a new class of software energy bugs on smartphones called no-sleep bugs, which arise from mis-handling power control APIs by apps or the framework and result in significant and unexpected battery drainage.

This paper makes the first advances towards understanding and automatically detecting software energy bugs on smartphones. It makes the following three contributions: (1) we present the first comprehensive study of real world no-sleep energy bug characteristics; (2) we propose the first automatic solution to detect these bugs based on the classic reaching definitions dataflow analysis algorithm; (3) we provide experimental data showing that our tool accurately detected all 17 known instances of no-sleep bugs and found 34 new bugs in the 73 apps examined.

Show less ⌃

Other authors

See publication ⧉

## Colour image compression by grey to colour conversion

Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series · 2011

Other authors

See publication ⧉

## Cricket Team Selection Using Evolutionary Multi-Objective Optimization

International Conference on Swarm, Evolutionary and Memetic Computing-2011, Springer LNCS · 2011

Other authors

# Courses

**Algorithm Design, Analysis, And Implementation**

CS 58000

**Compiling and Programming Systems**

CS 50200

**Data Communication and Computer Networks**

CS 53600

**Database Systems**

CS 54100

## Introduction to Programming Languages

CS 56500

## Introduction to Simulation and Modeling of Computer Systems

CS 54300

## Operating Systems

CS 50300

## Parallel Computing

CS 52500

## Software Engineering

CS 51000

# Projects

### Autonomous Vehicle Project - Abhyast

Mar 2009 - Feb 2011

Developed a 30cm x 30cm x 30cm vehicle which was able to navigate autonomously, provided the desired direction

Other creators

**See project** ↗

# Honors & Awards

Jul 2011

---

# Languages

### Hindi
Native or bilingual proficiency

### English
Professional working proficiency

---

# Groups

### Android Developer Group
-

### IITStartups
-

### Google Android
-

### Data Center Engineering
-

### CHATBOTS, Virtual Experts, Virtual Assistants
-

### NLP, Artificial Intelligence + Machine Learning professionals
-